

**Notice of Allowability**

Application No.

09/641,556

Examiner

Thomas K. Pham

Applicant(s)

ARORA ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the request for continued examination filed 06/23/2004.
2. ☒ The allowed claim(s) is/are 11-15.
3. ☒ The drawings filed on 17 August 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 6/23/04 & 9/22/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. David Lee on 06/28/2005.

The application has been amended as follows:

Claim 11. (Currently Amended) An architecture for an automation system, the automation system used to remotely control and monitor power-consuming devices drawing power from a power line in a building, the architecture comprising:

a lookup service maintaining a database of (1) the power-consuming devices including their attributes of device type and physical location, and (2) device objects corresponding to the power-consuming devices including a name for each device object mapped to at least one address;

a soft state store managing refresh information, in a persistent state or in a volatile state, for the power-consuming devices and the device objects to be within the predetermined refresh rate threshold;

a publication/subscription eventing component enabling subscriptions to events related to changes in the refresh information managed by the soft state store; and,

a power line monitor detecting superimposed transmissions from the power-consuming devices on the power line, which signal problems associated with the power-consuming devices.

*Reasons for Allowance*

2. Claims 11-15 are allowed.
3. The following is an examiner's statement of reasons for allowance:

While Sharma et al. ("Scalable Timers for Soft State Protocols") teaches soft state protocols use to periodic refresh messages to keep network state alive while adapting to changing network conditions. Based on the roles played by the nodes with respect to a particular state being referenced, the control message exchange among network nodes can be modeled as an exchange of messages between a sender and a receiver. Sharma et al. does not teach a soft state store managing refresh information, in a persistent state or in a volatile state, for the power-consuming devices and the device objects to be within the predetermined refresh rate threshold; and other limitations related to these features in combination with the remaining elements and features of the claimed invention.

Babu et al. (U.S. Patent No. 6,122,639) teaches mechanism for network device information collection and change detection including a data collection engine. The engine receives a network device name and queries the network to locate the named device. Babu et al. does not teach a soft state store managing refresh information, in a persistent state or in a volatile state, for the power-consuming devices and the device objects to be within the predetermined refresh rate threshold; and other limitations related to these features in combination with the remaining elements and features of the claimed invention.

Kumar et al. ("A pattern matching model for misuse intrusion detection") teaches a generic model of matching that can be usefully applied to misuse intrusion detection. Kumar et al. does not teach the automation system used to remotely control and monitor power-consuming

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devices; and other limitations related to these features in combination with the remaining elements and features of the claimed invention.

None of these references taken either alone or in combination discloses an architecture for an automation system, the automation system used to remotely control and monitor power-consuming devices drawing power from a power line in a building having all the claimed features of applicant's instant invention, specifically including: a soft state store managing refresh information, in a persistent state or in a volatile state, for the power-consuming devices and the device objects to be within the predetermined refresh rate threshold. Also, there is no motivation to combine the references to meet these limitations. It is for these reasons that applicant's invention defines over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (571) 272-3689, Monday to Thursday from 6:30 AM - 5:00 PM EST or contact Supervisor *Mr. Anthony Knight* at (571) 272-3687.

**Thomas Pham**  
*Patent Examiner*



July 5, 2005



**Anthony Knight**  
**Supervisory Patent Examiner**  
**Group 3600**